Memorandum

From: Ann Stavola, Biologist /s/ 12-1-03

Environmental Field Branch Office of Pesticide Programs

To: Arthur-Jean Williams, Chief

Environmental Field Branch Office of Pesticide Programs

Subject: Effects Determination for Fenamiphos for Pacific Anadromous Salmonids

I have reviewed the available data and other information for fenamiphos and its potential effects on Pacific anadromous salmonids and their critical habitat. Fenamiphos was cited by the Washington Toxics Coalition (WTC) as a pesticide they believe warrants review. The nematicide is very highly toxic to fish and invertebrates.

I have concluded that fenamiphos will have no effect on fifteen of the listed or proposed ESUs of Pacific salmon and steelhead, is not likely to may affect but is not likely to adversely affect nine ESUs and is likely to affect two ESUs. According to the 2002 IRED fenamiphos is undergoing a cancellation procedure and phase-out of production and use. It is scheduled to be phased out by May 2007. The use of fenamiphos has significantly decreased within the last five years. Only 70,000 pounds were used in California in 2002, and relatively little is used in the Pacific Northwest.

The major uses are applications to grapes in California and limited applications to raspberries in Washington and Oregon. There is no monitoring data from NAWQA, and the limited data from California indicates that, if present, fenamiphos and its degradates are present at very low levels, below the limits of detection. The lack of residues is attributed to the decreased use of the chemical and its nonpersistence in waterways.

The 2002 IRED indicated that acute and chronic risk quotients for fish and invertebrates exceeded the endangered species level of concern from all modeled uses. As the modeling conducted for the IRED was not done on sites in California or the Pacific Northwest, EFED conducted new PRZM-EXAMS models. The risk quotients based on the new EECs also indicated that the endangered species levels of concern were exceeded for acute and chronic effects to fish and invertebrates.

Our determination analysis indicated that there is a "no effect" for 15 ESUs, "may affect" for two ESUs and "not likely to adversely affect" for nine ESUs.

Attachment